

designation by Dall is allowed to stand *Neptunea* and *Boreotrophon* will be synonymous.

“There are thus two questions to be answered. First is the name *Neptunea* available at all, being nondescript? Second, if it is should it replace *Chrysodomus* or *Boreotrophon*?”

These questions have been considered by all members of the Committee, Horace B. Baker, Paul Bartsch, H. A. Pilsbry, and Harald A. Rehder, who unanimously agree in the following opinion, written by Rehder with the coöperation of Bartsch.

“Pilsbry has asked me to send you my opinion concerning the question of the type of *Neptunea* Bolten raised by Joshua L. Baily, Jr., as outlined in his letter herewith enclosed.

“It is the opinion of those of us here that the type designation of Cossmann (*Essais de Pal. Comp.*, vol. 4, 1901, p. 99) is valid. However, there is an earlier type designation which seems to be valid and which is found in an article by Kobelt (*Jahrbücher d. malak. Ges.*, vol. 3, 1876, p. 63). The sentences of importance in this connection are:

“‘Die Neptuneen der borealen und arctischen Regionen umfassen zwei ziemlich scharf geschiedene Gruppen, deren Typen einerseits *Neptunea antiqua*, andererseits *islandica* Chemnitz sind. Man hat aus ihnen zwei Gattungen, *Neptunea* and *Sipho*, gemacht, und Troschel hat in seinem ausgezeichneten Werke die letztere auf Grund einer Angabe Lovèn’s sogar ganz von *Neptunea* entfernt und zu den Fasciolariiden gestellt.’

“This earlier type designation, *Neptunea antiqua* (L.), fortunately, does not change the nomenclature of this group.”

Dr. Baily’s question as to the validity of an undefined name is not here considered, as the list of species is accepted as an “indication” of the characters of a genus in the meaning of the International Rules, Art. 25a.

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## SOME SHELLS FROM SOUTH CAPE MAY BEACH

BY ROBERT C. ALEXANDER

Lying between the western end of the Cape May boardwalk and the Coast Guard Station at Cape May Point, New Jersey, is a strip of beach a mile and a half long. This beach has no name as

far as I have been able to discover but, because a portion of it extends along the ocean front of South Cape May, I have become accustomed to refer to it as South Cape May Beach. During the summer of 1940, I visited this beach many times.

*Donax fossor* Say and *Nassarius trivittata* Say live near the ebb tide line; *Spisula solidissima* Dillwyn, *Mytilus edulis* Linne, *Mytilus edulis* var. *pellucidus* Pennant, and *Modiolus demissus*, an inhabitant of the salt marshes, are found cast up alive on the beach by the breakers; and growing on shells washed up on the beach are *Crepidula fornicata* Linne, *Crepidula convexa* Say, and *Crepidula plana* Say. *Crepidula plana* usually grows inside the opening of empty gastropod shells but I have found it here several times growing on the exterior of *Mytilus edulis* shells.

Besides the common shells which are found on the beach, I have found the worn valves of *Astarte castanea* Say which inhabits the deeper water off the coast, a few shells of *Epitonium lineatum* Say, and two small shells of *Epitonium humphreysii* Kiener. I believe this is the first time *Epitonium humphreysii* has been reported from this place. On several occasions, I have found a number of separate valves as well as large, entire shells of *Solen viridis* Say. Whether this species still lives off-shore here or whether these shells are remnants of a by-gone period, I do not know.

A part of this beach has been washed away by the ocean currents revealing flat areas of old meadow sod some of which are exposed at ebb tide. In this sod lives *Petricola pholadiformis* Lamarek. Although the color of this shell is normally white, I have found a great many of them here with a dull reddish-purple coloration near the posterior extremity and sometimes throughout a young shell. This coloration may be an artificial condition caused by an excess of some chemical in the sea or the land in this locality. However that may be, the same coloration is present in shells on the bay shore several miles above Cape May Point in Cold Spring Harbor and also on the beach east of Cape May. *Urosalpinx cinerea* Say lives on these flats and I have found one small living specimen of *Barnea truncata* Say here too.

Fossil shells found here during the summer include two valves of *Arca* (*Noetia*) *ponderosa* Say; a full-grown specimen of

*Busycon perversum* Linne; and three specimens of *Neptunea stonei* Pilsbry, varying from less than three-quarters of an inch to two and a half inches in length. The largest of these *Neptunea stonei* shells, an extinct species, is one of the best-preserved specimens I have seen.

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## EFFECT OF SOIL MOISTURE AND ALGAE ON THE SURVIVAL OF A POND SNAIL DURING PERIODS OF RELATIVE DRYNESS

BY E. J. STRANDINE

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The fate of aquatic snails in temporary prairie ponds during the dry summer months is a problem which few investigators have considered. Pilsbry (1896) records the observation that two dozen out of fifty *Lymnea bulimoides* Lea were still alive after having been out of water for 45 days. Cooke (1913) mentions that several aquatic snails will bury themselves in mud during periods of drought. Baker (1914) has observed that some species of aquatic snails may survive periods when ponds are dry, whereas in other species the adults die and only the eggs which are buried in the mud survive. Barlow (1933) has reported that certain species of Egyptian snails, which are involved in the spread of schistosomiasis, can survive drying for periods of 30 to 50 days. Van Cleave (1931) notes that the great drought of 1930 reduced land snails to 1 per cent of their usual numbers, and killed many pond and lake animals which were left in the dried out aquatic habitats.

During the course of an ecological survey of a temporary pond in Orland Park Township of Cook County, Illinois, I encountered a dense population of *Gyraulus parvus* (Say), which apparently is able to withstand long periods of drought.

This pond was completely dry from the first of August to the 11th of November, except for short periods following heavy rain storms. The algae (*Zygnema*, *Oedogonium*, and others) in the pond had formed a dry dense mat over the soil in the dried out pond, but the soil (Table 1) underneath this dry algal mat was very moist and exhibited a moisture gradient from the edge (Station A) to the deepest point in the pond (Station E).